Appendix

MBNMS Research Priorities
September 2007 RAP meeting

- In May 2007, the MBNMS Research Activity Panel (RAP) was asked to provide their opinions on what they considered were the research priorities of the MBNMS; those that were contained within the Joint Management Plan (JMP), and those that were not in the JMP
- In July 2007, polling results were collated; RAP feedback came in two forms:
    - Research Issues ("The What")
    - Ways to use SIMoN and RAP to address issues ("The How")
- At the September 2007 RAP meeting, the polling results were presented to the RAP on two posters ("The What" and "The How")
- The RAP was asked to use 5 sticker dots to vote on the Research Issues ("The What") they felt the Sanctuary should address as a priority in the next few years; the 5 dots could be used individually or in any combination (e.g., up to 5 dots per one issue)
- Voting results are presented in this Appendix
- In addition, several points were made:
    - Even something with zero votes made the top ten (in May/July 2007)
    - Low priority issues of top ten should be done when there is an opportunity for high leverage or impact with minimal effort (i.e., address low-lying fruit with big impacts)
    - Be cautious to address all of them, with at least some effort
    - MBNMS can have impacts on projects through funding, or other support; (e.g. MPAs are being addresses regionally, and if the MBNMS is involved, the RAP/Research Community could provide additional support)
- This Appendix (including the voting results on the next page), will be presented to Paul Michel (MBNMS Superintendent)

MBNMS Research Priorities – THE WHAT

RAP voting results at September 14, 2007 meeting

- Water quality (12 votes)
  - Harmful algal blooms
  - Beach closures & microbial contamination
  - Access to data
  - Dredge disposal

- Marine Protected Areas (9)
  - Effects on ecosystems
  - Distribution, characterization
  - Integration with federal closed areas
  - Network design & function
  - Effectiveness of MPAs
  - Integrate MPA monitoring with SIMoN
  - Integrate funds to establish monitoring for all MPAs in MBNMS

- Coastal Armoring (8)
  - Large-scale, holistic understanding of sediment transport and budget for Monterey Bay beaches, inner shelves, shelves and upper slopes and canyons
  - Management decisions regarding property protection

- Desalination (7)
  - Environmental standards
  - Modeling and monitoring
  - Access to data

- Introduced species (5)
  - Detect, control, eradicate

- Impacts of bottom trawling (5)
  - Effects on ecosystems
  - Distribution, characterization
  - Integration with federal closed areas
  - Design, function
  - Monitoring

- Ocean's response to global warming and regime shifts (5)
  - Their effects within the MBNMS (including the shift to a dinoflagellate-dominated phytoplankton community)
  - Sea level rise

- Trophic linkages among diverse living resources of the MBNMS, especially as related to ecosystem-based management (3)

- Big Sur Coast (2)
  - Improve understanding of Big Sur coast

- Davidson Seamount (0)
  - Characterization and ecological process studies

MBNMS Research Role – THE HOW

Feedback from the RAP (in NO particular order)

- SIMoN
  - Share and integrate regional monitoring information
  - Serve as warehouse of information pertaining to the MBNMS
  - Endowment or long-term, line-item in budget for sanctuary staff to: (1) fund research and fill knowledge gaps; and (2) support monitoring and information dissemination priorities

- RAP
  - Facilitate communication and science advice to MBNMS through meetings and existing RAP policy and protocols
  - Collaborative/supportive role to address research objectives of the sanctuary: funding, in-kind support (e.g., ship time)
  - Review research proposals for MBNMS financial support: ensure connection of proposed research to the MBNMS research community
  - Identify regional priorities, and provide funding and support to meet those goals. Work closely with CENCOOS. Recharge R/V *Fulmar* use for non-NOAA users to support MBNMS research or vessel upgrades. Through ship operations, database maintenance and targeted research, smooth out erratic funding from other state & federal sources
  - Serve as umbrella organization promoting communication among institutions, researchers & projects

- Building capacity
  - The MBNMS should build increasing capacity for social science synthesis and interpretation, including between humans and the biophysical environment